

MAR 16 2006

APPLICATION NO. 09/844,717  
ATTORNEY DOCKET NO. 68146988.714AMENDMENTS TO THE CLAIMS

Below is the entire set of pending claims pursuant to 37 C.F.R. 1.121(c).

Claim 1 (Currently Amended): A method for restricting access to information in a dimensional database, the dimensional database having dimension tables, ~~and~~ fact tables, and metadata describing the fact tables, said method comprising:

receiving a request from a requestor, said request associated with a plurality of request levels of a corresponding plurality of dimensions and said request associated with at least one fact, the request levels being levels of dimensional hierarchies and the requestor having a security designation; and

providing security measures at each of a dimension level and a fact level of the database, wherein providing security at the dimension level comprises:

comparing each of the plurality of request levels with each of a corresponding set of security levels, the security levels restricting the levels of each dimensional hierarchy to which the requestor is permitted access;

and wherein providing security at the fact level is distinct from providing security at the dimension level and providing security at the fact level comprises:

defining a security level for the at least one fact, wherein the security level for the at least one fact is stored as metadata in the database; and

comparing the security level for the at least one fact with the security designation of the requestor, the security designation restricting the facts to which the requestor is permitted access.

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**Claim 2 (Original):** The method of claim 1, further comprising:

retrieving the set of security levels from a plurality of sets of security levels, wherein each of the plurality of sets of security levels are associated with at least one requestor.

**Claim 3 (Original):** The method of claim 1, further comprising:

generating a query for the request with the request levels, wherein each of the plurality of request levels are equal or exceed each of the corresponding set of security levels; and

generating a query with at least one of the security levels, wherein at least one of the security levels exceeds a corresponding one of the request levels.

**Claim 4 (Original):** The method of claim 1, wherein the request is associated with one or more request constraints, and further comprising:

retrieving one or more security constraints; and

comparing each of the request constraints to a corresponding one of the security constraints.

**Claim 5 (Original):** The method of claim 4, further comprising:

generating the query wherein each of the request constraints is equivalent to the corresponding one of the security constraints; and

denying the request, wherein one of the request constraints is different from the corresponding one of the security constraints.

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Claim 6 (Original): The method of claim 1, further comprising:

determining whether the requestor is in a restricted group;

wherein the requestor is in a restricted group, adding a request level to the request,

wherein the added request level indicates that the requestor is in the restricted group; and

wherein the requestor is in an unrestricted group, adding request levels to the request, wherein the added request level indicates that the requestor is in the unrestricted group.

Claim 7 (Original): The method of claim 6, further comprising:

determining one or more measures associated with the request;

selecting a stargroup associated with each of the one or more measures associated with the request, wherein the stargroup further comprises one or more stars;

and

comparing each of the requested levels and the added levels to a corresponding plurality of aggregate levels associated with the stars.

Claim 8 (Currently Amended): A computer readable medium for storing a plurality of instructions for restricting access to information in a dimensional database, the dimensional database having dimension tables, and fact tables, and metadata describing the fact tables, said plurality of instructions comprising:

receiving a request from a requestor, said request associated with a plurality of request levels of a corresponding plurality of dimensions and said request associated with at least

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one fact, the request levels being levels of dimensional hierarchies and the requestor having a security designation; and

providing security measures at each of a dimension level and a fact level of the database, wherein providing security at the dimension level comprises:

comparing each of the plurality of request levels with each of a corresponding set of security levels, the security levels restricting the levels of each dimensional hierarchy to which the requestor is permitted access;

and wherein providing security at the fact level is distinct from providing security at the dimension level and providing security at the fact level comprises:

defining a security level for the at least one fact, wherein the security level for the at least one fact is stored as metadata in the database; and

comparing the security level for the at least one fact with the security designation of the requestor, the security designation restricting the facts to which the requestor is permitted access.

Claim 9 (Original): The computer readable medium of claim 8, wherein the plurality of instructions further comprising:

retrieving the set of security levels from a plurality of sets of security levels, wherein each of the plurality of sets of security levels are associated with at least one requestor.

Claim 10 (Original): The computer readable medium of claim 8, wherein the plurality of instructions further comprising:

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generating a query for the request, wherein each of the plurality of request levels are equal or exceed each of the corresponding set of security levels; and

generating a query with at least one of the security levels, wherein at least one of the security levels exceeds a corresponding one of the request levels.

Claim 11 (Original): The computer readable medium of claim 8, wherein the request is associated with one or more request constraints, and the plurality of instructions further comprising:

retrieving one or more security constraints; and comparing each of the request constraints to a corresponding one of the security constraints.

Claim 12 (Original): The computer readable medium of claim 11, wherein the plurality of instructions further comprising:

generating the query wherein each of the request constraints is equivalent to the corresponding one of the security constraints; and

denying the request, wherein one of the request constraints is different from the corresponding one of the security constraints.

Claim 13 (Original): The computer readable medium of claim 8, wherein the plurality of instructions further comprising:

determining whether the requestor is in a restricted group;

wherein the requestor is in a restricted group, adding a request level to the request, wherein the added request level indicates that the requestor is in the restricted group; and

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wherein the requestor is in an unrestricted group, adding requested levels to the request, wherein the added request level indicates that the requestor is in the unrestricted group.

Claim 14 (Original): The computer readable medium of claim 13, wherein the plurality of instructions further comprising:

determining one or more measures associated with the request;

selecting a stargroup associated with each of the one or more measures associated with the request, wherein the stargroup further comprises one or more stars; and

comparing each of the requested levels and the added levels to a corresponding plurality of aggregate levels associated with the stars.

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